

## Notes & Arguments

This application is about a methodology for developing financial instruments that can be traded in a continuous double sided auction platform.

*Note I: Each claim, as indicated by its original number, is followed by a short statement about the core issue of the claim. For the purpose of discussion, the “products” are suited for a continuous double sided electronic auction model.*

*Note II: Comment on references for rejection.*

*A) Shepherd’s patent 6,134,536 is a mechanism for management of risk related to buyer’s (the party) auction system. The seller (counter-party) is yet to be determined. Products are not the issue, that is, any (presumably manufactured) product can be included. The auction model employed is clearly single sided model not appropriate for continuous auction as in commodity exchanges.*

*B) Turbeville et al. Pub. No. US2001/027437A1 employs a method for calculating and managing risk; it pre-assumes the existence of traditionally listed products ( as well as any non standard products bilaterally contracted); in short, the product is a non issue*

**Claim 1:** Creation of a taxonomy that would lead to identifying the “root” of an “in-process-material”. Once the root product is identified, then based on defined value added additional key products can be specified. These products will then constitute a “class” of standard and semi standard products. Upon establishing this classification, contracts specifying these standard and value-added semi standard products can be designed as standard and semi standard contracts respectively. A semi standard contract comprises value-added products whose root product is a standard product. As an example, consider a memory device of 1 Gigabit capacity and most commonly configured and packaged as a root product associated with a general contract. Any other configuration or packaging of this device if accepted) will be considered a semi standard product prompting an amended “particular condition of contract”.

It should be noted that both standard root product and value-added semi standard products are market driven, that is, the initial selection of “tree” or main branch of a “tree” is based on overall market share with respect to other tree or branches, etc. In short an element of market intelligence is required prior to applying the methodology. The methodology also excludes products that are monopolized or brand protected or application specific.

Broadly, the idea is to concentrate on 80/20 rule as far as market shares of products are concerned. The rationale being that a double sided auction platform requires high liquidity and hence only a limited number of products can exhibit that characteristic.

**Shepherd's referenced patent** discusses a complete risk management process of submitting order, etc. leading to a match one-sided auction model. Shepherd does not address the development of products per se. Nor does he offer a systematic product classification.

**Claim 2:** The claim explains how a fungible product evolves.

**Claims 3 and 4:** Describe how the contract terms vary with respect to root product as well as time-dependent delivery. For example, capacitors are packaged and traded (quantitatively) quite differently from memories. Similarly delivery periods will cause changes in deliver notice date. These changes take place automatically as product changes

**Shepherd referenced patent:** As the example indicates the product and hence the contract is application specific and it will no longer conform to semi-standard product classification. Such bilateral contract is outside of the scope of above -mentioned claims

**Claim 5:** The claim refers to semi standard product as the underlying of particular condition of contract that is subject to qualitative change of contract. Again, these products (embedded to contracts) are semi standard, but not application specific, which would be non-standards.

**Turbeville's referenced publication(page 6 paras. 66-67):** Describes the characteristics and properties of a standard (commodity) contract. It does not address the creation and systematic approach to product development as claimed by inventor.

**Claim 6:** This claim refers to internationalization of cash management which requiring a base currency to enable trading platform matching mechanism. An average currency rate is determined daily for the purpose of price comparison and matching. It is not intended to convert currencies for traders. This step is related to settlement transaction.

**Shepherd referenced patent:** Currency conversion between counterparty are provided clearly for the purpose of settling account between buyer and seller and as such is a part of payment. This is not a referenced currency conversion based on a specific numeraire as described by claim inventor.

**Claims 7 and 8:** Noting that contracts comprise both standard product and semi standard products the particular conditions constituting semi standard contracts will have variable floor and ceiling price affecting the performance bonds. This “adjustments” will be made automatically, as semi-standard product specification changes.

**Turbeville’s referenced publication( page 4 paras 49-50):** The reference clearly states a fixed set of criteria based on which all contracts are evaluated, accepted or rejected for further processing. It is a static gauge that lacks flexibility and automatic adjustment as applied to semi standard products by inventor’s claims.

**Claim 9:** Draws distinction between a standard and semi standard contract as defined through its product. If the product is a root product the contract will be a general, i.e.; a root product related contract.

**Shepherd referenced patent:** In discussing the sequential matching process the topic covers application specific products traded between buyer and seller, including price and availability based on inventory. From the description the product does not appear to be commodity-like. There is no reference to the standard or semi standard product as defined by inventor’s claim.

**Claim 10:** The premise of this claim is, again, that each root product will lead to a branch and branch unfolds more and more-leading to its root. To avoid a huge number of possibilities the 80/20 rule is employed for assessing the market potential of such branches. The semi standard products ( and subsequently contracts) are therefore selective and semi-standard(generic) products. Based on this concept a series of automatic contract changes take place to introduce on-a fly product to the market.

**Shepherd referenced patent (58 lines 9-67):** The stated “complex” contract primary...etc., basic or advance, refers to practically any random contract which is clearly not comparable to inventor’s meticulously selected products. This is a general matching platform for one-sided auction.

**Turbeville’s referenced publication(page 2 paras 13-19):** The patent clearly addresses standard products already established as commodity. It further “selects” based on internal assumptions and criteria, more on ad-hoc basis. No systematic approach to selecting products is offered.

**Claim 11:** The system includes standard as well as semi standard products that based on market intelligence are tradable.

**Turbeville’s referenced publication( page 1 paras 4-8):** Clearly this patent describes traditional standardized products as practiced in existing trading forum. It does not discuss how products are developed. Further more it does not address the semi standard products.

**Claim 12:** Here, it is confirmed that standard or generic product whose technical specification remains unchanged such as 10-year treasury bond, or orange juice in contrast to technically evolving products.

**Turbeville's referenced publication(page 1 para 6):** Standard products contract are addressed as given. There is no relevance to inventor's claim.

**Claim 13:** This claim, as in claim 12, characterizes both standard and a semi standard product contracts as tradable (financial) instruments, which can continuously change hand.

**Turbeville's referenced publication(page 2 para 14):** No mention is made of how the standard product is produced. Neither is any mention of semi standard product.

**Claim 14:** The contract specification has a feature that depending on its underlying product the floor and ceiling price would change accordingly to facilitate calculation of performance bond.

**Turbeville's referenced publication(page 6 para 64):** The matching process once made, the exchange guarantees buyer and seller performance governed by performance bond. The minimum and maximum price fluctuation is an important reference for calculating the performance bond. Exchanges usually treat this task (change of performance bond) as back-office operation on ad hoc basis

**Claim 15:** The lot size and measure refer to physical characteristics of the product. Depending on specification of root product these physical properties change and as such is automatically adjusted in the contract.

**Turbeville's referenced publication(page 6 paras 66-67):** The patent discusses the effect of physicals with respect to logistics. It does not address the dynamics of physical properties, or how contract changes are made.

**Claim 16:** The local currency of price quote implies that the marketplaces for trading are physically located around the world and therefore the price matching requires a base currency to unify the prices. This is a nominal or average currency conversion and it is not used for financial settlement

**Shepherd referenced patent (40 lines 12-27):** Prices are established for unit entitlement payoff that is equivalent to settlement transaction.

**Claim 17:** From time to time as the product price changes (measured as moving average) the floor /ceiling prices adjust within the contract. This is required because of performance bond

**Turbeville's referenced publication(page 8 paras 89-91):** The proposed contract performance assurance assumes indefinite products and indefinite delivery dates requiring undetermined risk. Claim 17 does not delve into ways of measuring risk; it only updates floor/ceiling values, as new input for calculating performance bond.

**Claims 18-19:** A contract is designed on basis of a product that is generic or semi standard. In either case performance bond is price sensitive. This variability of product price is part of contract condition. Claim 19 is an independent claim that classifies non-standard contract as special case of semi standard contract.

**Turbeville's referenced publication(page 5 para 56 and page 2 paras. 13-14):** The risk that intermediary (marketplace) takes are measured in various forms. The collateral may be a cash, credit worthiness or combination.

**Claims 20,21 and 22:** Describing relationship between standard and semi standard contracts based on the underlying product whether standard or semi standard.

**Turbeville's referenced publication(page 2 paras. 13-14):** The publication generally relates to risk management particularly for less liquid products within the listed standard commodity. The publication assumes products as given.

## Worksheet for amended claims

1. (Currently amended) A methodology [, computer system and procedure] that provides a semi-standard contract between the parties containing general and particular conditions.  
Means of establishing a general condition of contract, remaining unchanged throughout contract life ;  
means of establishing a particular condition of contract containing [variable] properties that may change [s for different product] depending on application ; means of creating a contract based on semi standard product
2. (Currently amended) [System] Method of claim 1, wherein the contract represents product branches with common root, which [can be] are inter-changeable.
3. (Currently amended) [System] Method of claim 1, wherein the contract terms of minimum and maximum price fluctuation are set and are automatically modified as the root product changes.
4. (Currently amended) [System] Method of claim 1, wherein the contract terms of [physical]delivery notice day may change as contract delivery date changes.
5. (Currently amended) [System] Method of claim 1, wherein the contract terms for lot size and measure may change[s] as root products change[s]
6. (Currently amended) [System] Method of claim 1, wherein the non-US Dollar currency of price quote will change as the marketplace changes.
7. (Currently amended) [System] Method of claim 1 wherein, the contract terms for trading contracts containing minimum fluctuation of price and daily limits of price change[s] as products changes.
8. (Currently amended) [System] Method of claim 1 wherein, cash based performance bond is employed as risk management tool; further comprising automatic adjustment as products change.
9. (Currently amended) [System] Method of claim 1, wherein a [ manufactured] product is considered to be standard commodity if no [change in] particular condition of contract [occurs] is stipulated.
10. (Currently amended) A [system, computer program and] methodology that [transforms] formalizes a customized bilateral forward [contract] agreement into a financial instrument comprising of:  
Means of constructing a flexible semi-standard contract based on generic products with standard specification; means of applying the general condition of contract (specification) for financial instrument to reflect a generic product; means of further modifying the contract specification automatically to reflect the particular conditions of the forward [contract] agreement [or swap]; means of treating any [swap] forward agreement [ contract] as [variable] changeable financial instrument.
11. (Original) [System] Method of claim 10, wherein the contract represents buying and selling of a root product. Root products further comprising the base product of any subsequent value-added product

12. (Currently amended) [System] Method of claim 11, wherein the root product is technically equivalent to generic root product if no changes in contract specification is made and no value added.
13. (Original) [System] Method of claim 12, wherein a contract specification based on generic root product is interchangeable and as such is considered a financial instrument
14. (Currently modified) [System] Method of claim 11, wherein the contract specification for minimum and maximum price fluctuation is modified as the root products change[s].
15. (Currently amended) [System] Method of claim 11, wherein the contract specifications for lot size and measure changes as the root products change[s].
16. (Currently amended) [System] Method of claim 11, wherein the local currency of price quote changes as the marketplace changes.
17. (Currently amended) [System] Method of claim 14 wherein, the limited price fluctuation [varies] is modified [with respect to] governed by [product's] moving average prices.
18. (Currently amended) [System] Method of claim 10 wherein, the contract specification employs, variable cash based performance bond as risk management tool.
19. (Currently amended) [System] Method of claim 10, wherein any non-standard contract can employ semi-standard contract as underlying financial instrument.
20. (Currently amended) [System] Method of claim 19, wherein any standard commodity contract is special case of semi-standard contract.
21. (Currently amended) [System] Method of claim 20, wherein a standard contracts is automatically generated if the root product is a standard commodity.
22. (Currently amended) [System] Method of claim 21, wherein a contract based on the root [c] product and specification can be traded as financial instrument